

XX.—*The Cyclostomas of Madeira belonging to the Genus Craspedopoma of Pfeiffer : with Descriptions of Four new Madeiran and One new Canarian Species.* By R. T. LOWE, M.A.

1. *C. lucidum*, Lowe.

T. globoso-conoidea abbreviato-obesiuscula læviuscula nitida solidiuscula obsoletissime angulato-carinata v. ecarinata subimperfurata s. rima angustissima strictissima v. fere clausa; spira abbreviata, anfr. subtumido-convexis transverse inæqualiter substriatis, aliquando indistincte creberrime hinc inde transverse subtilissime striatis spiraliterque obsoletissime striolatis, ultimo majore latiore ventricosio, sutura valde impressa; apertura spiram fere æquante. —Prim. 66; Catal. Moll. Mad. in Proceed. Zool. Soc. 1854, 216; Pf. Mon. Pneum. 51. n^o. 88.

a. polita; lævissima nitidissima plerumque major, striolis transversis inæqualibus exoletis, spiralibus nullis.—Prim. l. c. t. 6. f. 40; Küst. Mart. et Chemn. t. 13. ff. 26, 27.

Long. $6\frac{1}{2}$ – $6\frac{3}{4}$, diam. 6 – $5\frac{3}{4}$ mill.; apert. 3, spira 4 longa; anfr. $4\frac{1}{2}$ –5.

β. rustica; sericeo-nitens paulo plerumque minor, striolis transversis creberrimis subtilissimis distinctiusculis, spiralibus exoletis-simis obscuris paucis hinc inde obsoletissime punctulatis subdeussata.

Long. 5–6, diam. $5\frac{1}{4}$ – $5\frac{1}{2}$ mill.; apert. 3, spira 3 longa; anfr. $4\frac{1}{2}$ –5.

Hab. in Maderæ declivibus sylvaticis dumosisve rupibusve humidis supra 1500 ped. ubique recens, necnon fossilis ad Caniçal, *β* vulg., *a* rara. Neque in Portu S^{to} neque in Desertis recens fossilisve occurrit; exemplar enim unicum Porto-sanctanum, ex quo in Catal. Moll. Mad. l. c. *C. lucidum* “In Portu S^{to} tantum fossile rariss.” dicitur, ad *C. flavescens* v. *Neritoides* procul dubio potius spectat. In Canariis etiam *C. lucidum* omnino deest.

Extremely variable in colour: either dark olivaceous approaching to greenish black, chestnut, or coffee-brown of various intensity, with often a single light band on the last volution, or light-yellowish straw or olive horn-colour; and either plain, or varied with dark bottle-green or light yellowish spiral lines or longitudinal stripes or strigæ.

It is also variable in the prominence of the angle of the last volution, which is, however, mostly altogether obsolete or evanescent.

Traces of a few faint, obsolete, irregular, spiral striæ are usually discernible in *β* below the suture, on the last volution, towards the peristome, or in the neighbourhood of the umbilical cleft. Opercle reddish chestnut.

wary, distinct from *C. galeatus*, and apparently of this species, has just been received by the Zoological Society of Amsterdam. Another new species has recently been described in the Proceedings of the Zoological Society of London (1860, pp. 211 & 250), from a bird in their Gardens, under the name *C. bicarunculatus*, making the fifth of the group.—P. L. S.

2. *C. Neritoides*.

T. ovato-conoidea nitida solidiuscula *distincte angulato-carinata* subimperfurata s. rima angustissima strictissima v. fere clausa, griseo-fulva vel chalybeo-cærulescens; spira conica subabbreviata, anfr. convexo-planatis spiraliter obsoletissime et transverse exilissime creberrimeque striolatis, ultimo majore subventricose; sutura distincta haud impressa; apert. spiram subæquante.

Long. $5-5\frac{1}{2}$, diam. $4\frac{1}{2}-5$ mill.; apert. $2\frac{3}{4}$, spira 3 longa; anfr. $4\frac{1}{2}$.

Hab. in Maderæ sylvaticis humidis ad alt. 2000 fere ped. loco "Lombo da Vaca" dicto ad S. Vicente oræ Septentr. Maderæ.

Possibly merely an extreme form of *C. lucidum* β , but peculiar in colouring and habit, as well as shape and contour. I possess only three examples, found by myself in July 1850.

Smaller than *C. lucidum* β . Spire more conical, with straight sides and flattened volutions. Colour very peculiar, dark fulvous-grey or purplish liver-brown approaching to black, with a metallic steely lustre, and suffused, or blotched and marbled, with pale straw-colour. Opercle bright sienna-red or reddish chestnut.

There is something in the colour, shape, and habit of this pretty little shell, reminding one of *Littorina Neritoides* (L.).

3. *C. flavescens*.

T. pyramidato-conoidea sericeo-nitens tenuis *distincte angulato-carinata* subimperfurata s. rima angustissima strictissima v. fere clausa, pallide stramineo-flavescens v. virescens unicolor; spira subpyramidata subproducta, anfr. planiusculis spiraliter distinctiuscule tenuissimeque et transverse exilissime creberrimeque striolatis v. subtilissime reticulatim decussatis, ultimo vix majore subventricoso; sutura distincta haud impressa; apert. spira *distincte* brevior.

Long. $5\frac{1}{2}-6$, diam. 4-5 mill.; apert. $2\frac{3}{4}$, spira $3\frac{1}{2}$ longa; anfr. 5.

Hab. in Maderæ sylvaticis dumosisve humidis ad alt. 3000 fere ped. convallium Rib. Frio et Rib. da Metade, cum *C. lucido* α et β commixta.

Possibly a mere elongated form of *C. Neritoides*; but, besides the more produced spire and pyramidal shape, it also differs in its thinner, lighter shell, of a uniform pale brown or straw-colour, with sometimes a greenish tinge. The opercle is bright sienna-red or reddish chestnut.

About two dozen examples of this shell occurred in a bag containing many hundred specimens of *C. lucidum* (principally var. β), collected by me in August and September 1849, along the Levada in the above-named ravines. I had considered it to be the male of *C. lucidum*, on account of its more pyramidal or slender form; and, notwithstanding the obvious discrepancies expressed above in the diagnosis, I am by no means clear that it may not eventually prove to be so.

4. *C. Monizianum*.

T. subpyramidato-conoidea sericeo-nitens tenuiuscula omnino ecarinata laxiuscule rimato-perforata fusco-coffeacea; spira elevatiuscula subproducta, anfr. æquicrescentibus subdepressiusculis tumidis, striolis vel subtilissimis creberrimis æquissimis distinctis transversis alias spirales obsoletas valde indistinctas tenuissime reticulatim decussantibus, ultimo subdepresso haud ventricoso; sutura valde impressa profunda; apert. spira distincte brevior.

Long. $5-5\frac{1}{2}$, diam. $4\frac{1}{2}-5$ mill.; apert. $2\frac{1}{4}$, spira $3-3\frac{1}{4}$ longa; anfr. 5.

Hab. in Promontorio "Garajão" vel "Brazen Head" dicto Maderæ in scaturigine v. rupe madida.

The volutions are even more tumid, and the suture more deeply impressed, than in any form of *C. lucidum*, from which it differs also in its smaller size, elongate pyramidal shape, open rimal perforation, and regularly increasing, vertically slightly flattened or depressed, reticulately striolate volutions. Colour uniform plain dark coffee-brown. Opercle unknown.

Named in honour of my able and observant botanical friend Sr. J. M. Moniz, who found it last year on the Brazen Head, near Funchal, and who, supposing it to be distinct from the common *C. lucidum*, has most liberally furnished me with two out of his four or five specimens. On referring to my own collections, I find, however, four examples of precisely the same shell, collected by myself on the same spot in January 1851, and kept apart for ulterior examination. Thus a sufficiency of specimens exists to warrant some reliance on the constancy of the above-recorded characters.

I desire to commend, however, all the four preceding species to the close study and attention of observers on the spot, who alone will be able to decide by examination of the animals, and more numerous examples of the shells from the same or different localities, whether the above differences are merely sexual and varietal, or really good and valid. For myself, I must confess to having either overlooked or disregarded them as unimportant until very recently.

5. *C. annulatum*.

T. breviter subpyramidato-conoidea sericeo-nitens tenuiuscula largiuscule rimato-umbilicata omnino ecarinata fusco-coffeacea; spira elevatiuscula subproducta, anfr. æquicrescentibus valde tumidis depressis, intermediis costis æquidistantibus transversis concinenter annulatis ceterum omnino lævigatis vel aliquando tenuissime et obsoletissime spiraler substriolatis, ultimo depresso haud ventricoso peristoma versus exannulato costis vel rarioribus v. evanescentibus v. nullis; sutura valde profunda inciso-impressa; apert. spira vix brevior.

Long. $4-4\frac{1}{2}$, diam. $4-4\frac{1}{2}$ mill.; apert. $2-2\frac{1}{2}$, spira $2\frac{1}{2}$ longa; anfr. $4\frac{1}{2}$.

Hab. in declivibus rupibusve humidis sylvarum Insularum Cana-

riensium Ferri (Hierro) ad locum "El Golfo" dictum, necnon Palmæ in convallibus "Barranco de Agua" et "Barr^o de Galga" dictis.

Three examples of this very distinct little species were found first by Mr. Wollaston, when we explored together, in February 1858, for three or four days, the vast and magnificent sylvan amphitheatre of El Golfo, on the north-west coast of Hierro; and we each discovered a few more subsequently in two localities in Palma, where it appears, like several *Helices*, to have escaped the extensive, though by no means "exhaustive," researches of Herr Blauner.

Opercle (in a single Hierro example) pale yellowish horn-colour, thin, with membranous colourless edges, and obscurely spiral.

6. *C. Lyonnetianum*, Lowe.

T. conoideo-pyramidata trochoidea sericeo-nitens solidiuscula angulato-carinata anguste rimato-perforata fusco-coffeacea; spira elevato-producta pyramidata, anfr. æquiescentibus convexo-planatis æqualiter et concinniter exilissime et creberrime spiraliter, inæqualiter et rudiusscule v. subgrossiuscule transverse striatis; sutura distincta impressa; apert. spira distincte brevior.—Syn. Diagn. 15. n^o 70; Catal. Moll. Mad. 217; Pf. Mon. Pneum. 52. n^o 89. Long. 4–5, diam. 3–3½ mill.; apert. 1¾–2, spira 2¼–3 longa; anfr. 5–5½.

Hab. in rupibus declivibusque irriguis convallium (Rib. de S^{ta} Luzia et Rib. do Inferno) Maderæ recens, necnon fossilis ad Caniçal.

Opercle thin, obscurely spiral, pale yellowish or horn-colour, with whitish membranous edges.

7. *C. trochoideum*.

T. abbreviato-conoidea exacte trochiformis nitida tenuiuscula acute angulato-carinata imperforato-rimata, rima fere v. omnino clausa; spira conico-acuta, anfr. inæquiescentibus planatis, striolis spirilibus creberrimis exilissimis æqualibus alias transversas tenues exoletas crebras subinæquales subtilissime decussantibus, ultimo subito majore antice sursum subdilato abrupte ascendente, subtus fere planato; sutura distincta parum impressa antice subito ascendente; apert. spira vix brevior.

Long. 4¼–4½, diam. 4–3¾ mill.; apert. 2, spira 2¼–2½ longa; anfr. 5½.

Hab. in convalle "Rib. do Inferno" dicta oræ Septentr. Maderæ.

Described from three living examples (wanting the opercle), kindly lent me for the purpose by T. V. Wollaston, Esq., who received them from S^r. Moniz and Mr. T. S. Leacock. They were discovered in the locality above recorded in 1859 by a German naturalist, whose name, unfortunately, Mr. Wollaston does not precisely recollect, but which otherwise would have

been deservedly commemorated by its employment as a designation for this most distinct and elegant little species, which, with the same sculpture, size, and general features as *C. Lyonnese-tianum*, yet differs from it markedly in its exactly trochiform, shorter, or more broadly conical shape, with a flat or flattened base, sharp keel, shorter, less pyramidal, straighter-sided spire, and flatter volutions: resembling a miniature *Trochus Niloticus* or *zizyphinus*, L. The colour is, in one example, pale straw, with spiral bands of dark fasciated hair-like lines; in another very dark brown, with narrow spiral yellowish- or greenish-white lines; and the third is uniform plain coffee-brown,—the flattened base, except the keel, being in all three of the latter colour.

Lea Rectory, July 12, 1860.

XXI.—*Mollusca Japonica*: New Species of *Aclis*, *Ebala*, *Dunkeria*, &c. By ARTHUR ADAMS, F.L.S. &c.

THE genus *Aclis* of Lovén should, I believe, be distributed into four genera:—*Aclis*, or those “cingulis elevatis acutis obducti;” *Ebala*, Gray, of which *A. nitidissima* is the type; *Hyalia*, H. & A. Adams, of which *A. unica* is an example; and *Dunkeria* of Carpenter, which has cancellated whorls, and is neither an *Aclis* nor a *Turbonilla*. I here indicate four species of *Aclis*, two of *Ebala*, and three of *Dunkeria*, all of which I believe to be new.

I add a notice of a very elegant little shell, which appears to me to be a subgenus of *Scala*, and different from the *Aciona* of Mörch, which is founded on *Scalaria borealis*, Beck (= *S. Eschrichtii*, Hold. & Möll. = *S. undulata*, Sow.), a species of which I obtained on the coast of Manchuria. I also add descriptions of a fourth species of *Isapis*, H. & A. Adams, and one of *Cranopsis*, A. Adams.

Genus *ACLIS*, Lovén.

Testa turrita, rimata; anfractus numerosi, cingulis elevatis acutis obducti. Apertura ovalis.

Aclis labiata, A. Adams.

A. testa turrita, rimata, alba; anfractibus $7\frac{1}{2}$, convexis, cingulis tribus acutis prominentibus, in anfractu ultimo quatuor, interstitiis simplicibus, profundis; apertura ovali, expansa; labio simplici; labro expanso, antice subreflexo, margine integro, arcuato.

Hab. Off Mino-Sima; 63 fathoms.

Aclis cingulata, A. Adams.

A. testa turrita, rimata, alba; anfractibus $6\frac{1}{2}$, convexis, cingulis duobus acutis prominentibus, tribus in anfractu ultimo, interstitiis